Global Standardization Activities

Report on First Meeting of ITU-T TSAG (Telecommunication Standardization Advisory Group) for the Study Period 2017 to 2020

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Abstract

The first meeting of the Telecommunication Standardization Advisory Group (TSAG) of the International Telecommunication Union - Telecommunication Standardization Sector (ITU-T) for the study period 2017 to 2020 was held at the ITU headquarters in Geneva, Switzerland, May 1–4, 2015, with some 120 delegates from 40 countries attending. The 11-person Japanese contingent comprised representatives of the Ministry of Internal Affairs and Communications, NTT, KDDI, Hitachi, Fujitsu, Mitsubishi Electric, NEC, OKI, and TTC (The Telecommunication Technology Committee). The new organization of TSAG is overviewed, and topics discussed during the meeting are described in this article.

Keywords: ITU-T TSAG, digital currency, blockchain

1. New organization of TSAG

It was decided that the Telecommunication Standardization Advisory Group (TSAG) will be made up of six Rapporteur Groups (RGs):

- (1) Standardization Strategy (StdsStrat)
- (2) Working Methods (WM)
- (3) Work Programme and Study Group Structure (WP)
- (4) Strengthening Cooperation/Collaboration (SC)
- (5) Strategic and Operational Plan (SOP)
- (6) Review of WTSA Resolutions^{*1} (ResReview)

Yoichi Maeda, chief executive officer of TTC (The Telecommunication Technology Committee), was appointed rapporteur for the newly established RG-StdsStrat. Six associate rapporteurs from the telecommunications industry (Alibaba, Nokia, Ericsson, Tunisie Telecom, Cisco, and one person to be selected from Central and South America) were also appointed to this RG.

2. Establishment of Focus Groups on digital finance

The opening plenary meeting discussed establishment of two Focus Groups (FGs) on digital finance. The first was an FG on network infrastructure for digital fiat currency, which was jointly proposed by eCurrency Mint, several African countries, and AICTO (Arab Information and Communication Technologies Organization). The second was an FG on blockchains, which was proposed by Study Group (SG) 17 and South Korea. The US and UK representatives expressed concerns about the relations between the new FGs and the results of the FG on Digital Financial Services, which had completed its two-year study, and concerns about the need for the two new FGs and the relations between them.

^{*1} Resolution: The resulting document of the World Telecommunication Standardization Assembly (WTSA) giving guidance to the ITU-T structure, study programmes, and work methods.

Since a conclusion on this matter was not reached at the plenary meeting, the RG-StdsStrat took over the discussion. There was a dispute regarding the FG on digital fiat currency. The US in particular insisted on adding "network infrastructure" to the title of the FG because it believes that the FG should limit its study to network infrastructure. The eCurrency representative insisted that "fiat" be included. The title that was ultimately adopted was "Focus Group on Digital Currency including Digital Fiat Currency." Establishment of the FG was approved, and David Wen (eCurrency) was appointed as its chair. Regarding the FG on blockchains, it was decided that this group should address Digital Ledger Technology (DLT), which is a concept that is broader than blockchains, and that relations with other standards bodies (U4SSC*2, ISO/ TC307^{*3}, etc.) should be clarified. Ultimately, the "Focus Group on Application of Distributed Ledger Technology" was established, and David Watrin (Swisscom) was appointed as its chair.

3. Transfer of results of FG on Digital Financial Services

The FG on Digital Financial Services concluded its two-year study in December 2016, having produced 28 reports. The reports were sent to relevant SGs (SG2^{*4}, SG3^{*5}, SG12^{*6}, SG16^{*7}, and SG17^{*8}). It was agreed that the focus of study on this matter will move to development of recommendations on service definitions, regulations, network requirements, security, and interoperability of digital financial services, within the ambit of ITU-T expertise.

4. Major discussions at each RG

Here, the main topics of discussion in each group and the conclusions reached are described.

4.1 RG-StdsStrat

It was agreed that the group's role is to advise TSAG and SGs on standardization strategies for the sector by identifying the main technological trends as well as the market, economic, and policy needs in ITU-T's fields of activity. Japan submitted a contribution introducing "Society 5.0."*9 It proposed that each country's policy and the plans of other standards development organizations regarding standardization strategy be taken into consideration in developing ITU-T's standardization strategy.

4.2 RG-WM

This group reviewed resolutions and recommendations relating to working methods. On the basis of the discussion on working methods at WTSA-16, it was decided that problems identified in Resolution 1 and Recommendations A.1 and A.13 would be reviewed, and necessary revisions would be made. It was also agreed to study differences between what is specified in Recommendation A.1 and what is written in the rapporteur/editor manual.

4.3 RG-WP

The group approved introduction of new questions and revisions to existing questions. New and revised questions approved in this meeting are listed in **Table 1**. SG3's proposed new question, "economic and policy issues pertaining to QoS/QoE," encountered opposition from SG12. It was decided that SG3 and SG12 will jointly study the matter before the next TSAG meeting. Regarding which SG should lead the study on big data, it was decided not to identify any lead SG but rather, to encourage collaboration between SGs. Regarding obsolete work items (work items for which no progress had been made for 18 months), TSAG will send liaison statements to the respective SGs requesting each group to review such work items.

4.4 RG-SC

This group discussed collaboration with open source communities. Canada and the US indicated a need to define open source, to analyze collaboration

- *2 U4SSC: United for Smart Sustainable Cities. This initiative was established by ITU and the United Nations Economic Commission for Europe.
- *3 ISO/TC307: The Technical Committee on standardization of blockchain technologies and distributed ledger technologies of the International Organization for Standardization (ISO).
- *4 SG2: Operational aspects of service provision and telecommunications management.
- *5 SG3: Tariff and accounting principles and international telecommunication/ICT (information and communication technology) economic and policy issues.
- *6 SG12: Performance, quality of service (QoS), and quality of experience (QoE).
- *7 SG16: Multimedia encoding, systems, and applications.
- *8 SG17: Security.
- *9 Society 5.0: The Cabinet Office of the Government of Japan is promoting the creation of a super smart society (Society 5.0) under the theme "New Initiatives toward Japanese Industry of the Future and Social Transformation" as The 5th Science and Technology Basic Plan. Society 5.0 signifies how society has become progressively smarter through its transformation from a huntergatherer society to an agricultural society, industrial society, and information society, and the coming super smart society.

SG	Question number	Question title	Туре
SG3	Q12/3	Tariffs, economic and policy issues pertaining to mobile financial services (MFS)	New
	Q13/3	Study of tariff, charging issues of settlements agreement of trans-multi-country terrestrial telecommunication cables	New
SG13	Q19/13	End-to-end cloud computing management, cloud security and big data governance	Revised
	Q20/13	IMT-2020: network requirements and financial architecture	Revised
	Q21/13	Network softwarization including software-defined networking, network slicing and orchestration	Revised
SG17	Q6/17	Security aspects of telecommunication services, networks and Internet of Things	Revised
	Q13/17	Security aspects for Intelligent Transport Systems	New
SG20	Q1/20	End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C	Revised and restructured
	Q2/20	Requirements, capabilities and use cases across verticals	
	Q3/20	Architectures, management, protocols and Quality of Service	
	Q4/20	e/Smart service, applications and supporting platforms	
	Q5/20	Research and emerging technologies, terminology and definitions	
	Q6/20	Security, privacy, trust, and identification for IoT and SC&C	
	Q7/20	Evaluation and assessment of smart sustainable cities and communities	

Table 1. New and revised questions approved at this meeting.

Underlining indicates revised parts.

IoT: Internet of Things SC&C: smart cities and communities

with existing open source communities, to examine the status of use of open source programs within ITU-T, and to study the relation between the licensing mechanism and the copyright guideline.

5. Future plan

The second TSAG meeting will be held in Geneva from February 26 through March 2, 2018.



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He received a Ph.D. in electrical engineering from Yamagata University in 2011. From 1993 to 2000, he conducted research on high-density and aerial optical fiber cables at NTT Access Network Service Systems Laboratories. Since 2000, he has been responsible for standardization strategy planning for NTT research and development. He has been a delegate of International Electrotechnical Commission (IEC) Subcommittee 86A (optical fiber and cable) since 1998 and of the ITU-T Telecommunication Standardization Advisory Group since 2003. He is a vice-chair of the Expert Group on Bridging the Standardization Gap in the Asia-Pacific Telecommunity Standardization Program Forum. In 2004, he received an award from the IEC Activities Promotion Committee of Japan for his contributions to standardization work in IEC.